

Diffusers for noise reduction

Askalon calculate and manufacture diffusers for compressible medias in applications that need lower noise levels.

Reducing pressure for compressible medias often result in noise and vibration problems in pipe systems.

Two alternative solutions are available to reduce problems. First is to take all pressure drop and noise treatment in a valve. This usually ends up in a large and expensive valve. Second alternative is to divide pressure drop in two or more stages. First stage is a pressure reducing control valve which control amount of flow. Downstream of control valve are one or more diffusers calculated depending of pressure drop and noise level. Diffusers are normally designed for critical pressure drop. Control valve can now be reduced is size due to increased back pressure. Increased pipe diameter due to media expansion can easily be achieved in diffuser design.

Drawings below show control valve with three stage diffuser. Application is steam pressure reduction to atmospheric vessel.

